

Amendments to the specification

Please amendment paragraph 38 at page 11.

In contrast, as discovered in the subject invention, SMAs strengthened by coherent, low-misfit, nanoscale precipitates show no significant increase in transformation hysteresis, indicating no significant interfacial friction from the precipitates. The coherent, low-misfit precipitates lower the chemical equilibrium T_0 temperature, which is the temperature at which the parent and martensite have the same Gibbs free energy. For precipitate particles of equilibrium phases which do not transform into martensite, but are elastically sheared by the transformation, a significant amount of reversible elastic strain energy is stored. This stored energy is equivalent to further undercooling. The chemical driving force due to the undercooling is given by $\Delta G = \Delta s \Delta T$ where Δs is the entropy change of the transformation per unit volume, and $\Delta T = T_0 - T$ is the amount of undercooling from the chemical equilibrium temperature, T_0 .